HANDBOOK OF PHONOLOGICAL DATA
FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

Compiled and edited by

John H. Crothers
James P. Lorentz
Donald A. Sherman
Marilyn M. Vihman

© 1979 by The Board of Trustees of the Leland Stanford Junior University
All rights reserved
Printed in the United States of America

295 Cheremis	295 Cheremis	295 Cheremis
295 01 p [b][60] (allo,neutral) */beta/	11 s[31]	
	12 z	
295 02 p-palatalized[30] (loan)	13 s-palatalized[01 30] (loan)	51 i[05] [i-long][65] [i/yod][66 67]
295 03 t [d][60] [t-lax][61]	14 s-hacek[31]	52 u-trema[05] [u-trema-long][65]
	15 z-hacek	53 o-mid-trema[05]
295 04 t-palatalized[30] (loan)	16 x[30] (loan)	54 epsilon[05 06]
	17 gamma	55 schwa[07 08 68] (tag(-),neutral,allo)
295 05 k [g][60]	18 m	
	19 n	56 u[09] [u-long][65]
295 06 t/s[01 30] (loan)	20 n-palatal[02]	
	21 eng	57 o[10] [o-long][69]
295 07 t/s-hacek [d/z-hacek][60]	22 l[03] [l-palatalized][62]	58 caret[11] [a-front][05 70] [alpha-unrounded][71]
295 08 beta *[b] [v] (free)	23 l-palatal[02 32]	59 yod[12]
	24 r-flap[03] [r-flap-palatalized][63] [r-trill-syllabic][04 64]	60 schwa-voiceless[31] (transitional)
295 09 f[30] (loan)		
295 10 eth		

295 $a Cheremis $A Mari $b East $d Finno-Ugric $e EC USSR (Bashkirskaja SSR) $f 540,000 $g Merritt Ruhlen$g Marilyn Vihman (review)

295 $a Ristinen, Elaine K. $b 1960 $c An East Cheremis Phonology $f (Uralic and Altaic Series, Vol. 1) $g Bloomington: Indiana University $q one informant $Q taped texts; no direct contact with informant

295 $a STRESS $A "It has not been possible for us to make any satisfactory statement about the occurrence of stress, although certain syllables seem to be more prominent than others, and this prominence affects the occurrence of certain allophones, particularly of /r-flap/.... The most reliable rule we have been able to formulate is rather unsatisfactory. It is that the final syllable of a word is most generally stressed, but certain non-initial morphemes...are never stressed." (p.259)

295 $a SYLLABLE $A (C)(C)V(C)(C)

295 $a VOWEL HARMONY $A The rounded vowels show straightforward front/back harmony (/o, u/ cannot co-occur with /o-mid-trema, u-trema/ in the same word). The unrounded vowels (/caret, schwa, epsilon, i/) are neutral in non-initial syllables, but when they occur in the first syllable, they condition the front rounded vowels. (p.260f) [MV]

295 01 $A Point of articulation for /t/s, s-palatalized/ is unclear.

295 02 $A "It is not clear whether these phonemes [/n-palatal, l-palatal/] have a single or double articulation. If single, they may be called 'palatal' to distinguish them from 'palatalized,' which implies a double articulation, such as have the palatalized consonants in Russian." (p.283)

295 03 $A /l, r-flap/ are described as "dental-alveolar."

295 04 $A [r-trill-syllabic] is described as having "two or more dental-alveolar flaps with strong vocalic resonance throughout." (p.256)

295 05 $A /i, u-trema, o-mid-trema, epsilon/ and [a-front] are described as "front to central."

(p.256, 257)

295 06 $A /epsilon/ is usually low-mid, sometimes high mid. (p.257)

295 07 $A [schwa] is described as "central to back." (p.258)

295 08 $A Except in monosyllabic words, /schwa/ may be a "reduced vowel." (p.258)

295 09 $A /u/ is described as "high to lower-high." (p.257)

295 10 $A /o/ is described as "higher to lower-mid." (p.257)

295 11 $A /caret/ is described as "mid to low." (p.257)

295 12 $A /yod/ is pronounced "with varying spirantal quality." (p.256)

295 30 $A "Cheremis speakers who are proficient in Russian may also use Russian phonemes such as /x/, /f/, /t/s/, /p-palatalized/, /s-palatalized/, and /t-palatalized/ in Russian proper names and loan words." (p.253)

295 31 $A "Initially before a stop, /s/ and /s-hacek/ are usually preceded by a non-phonemic short unrounded mid central vowel, often voiceless." (p.255)

295 32 $A Ristinen did not hear /l-palatal/ (see fn. 17) but got it from another source. Difference from fronted /l/ is not established.

295 60 $A Stops and the affricate /t/s-hacek/ are voiced after nasals; fricatives become stops after nasals. (p.254ff, 266)

295 61 $A /t/ becomes lenis before /l/. (p.255, 266)

295 62 $A /l/ is palatalized between front vowels. (p.256)

295 63 $A /r-flap/ is palatalized "before /yod/." (p.257)

295 64 $A /r-flap/ is syllabic and trilled when between two consonants, or one consonant and word boundary.... When [r-trill-syllabic] is unstressed, it has a "preceding non-phonemic vocalic resonance of varying quality." (p.256)

295 65 $A /i, u-trema, u/ are long "finally." (p.256, 257)

295 66 $A The high front vowels may be diphthongized word-finally. (p.256f)

295 67 $A /i/ is diphthongized pre-vocalically. (p.256)

295 68 $A The mid vowels are reduced to [schwa] finally in polysyllabic words. (p.257)

295 69 $A /o/ is long "finally in monosyllabic words." (p.257)

295 70 $A /caret/ is realized as [a-front] "after /o-mid-trema/, /u-trema/, [a-front], [alpha-unrounded] in preceding syllable; preceding or following /l-palatal/, /n-palatal/, /yod/." (p.25)

295 71 $A /caret/ is realized as [alpha-unrounded] finally. (p.257)